

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/010584

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K16/24 C07K16/28 A61P37/00 A61K39/395

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | <p>EP 1 108 435 A (CHUGAI PHARMACEUTICAL CO LTD) 20 June 2001 (2001-06-20)</p> <p>column 1, paragraph 7</p> <p>column 2, paragraph 10 - column 3, paragraph 21</p> <p>column 4, paragraph 27 - paragraph 29</p> <p>column 5, paragraph 37</p> <p>column 9, paragraph 60 - column 10, paragraph 68</p> <p>column 13, paragraph 84 - paragraph 86</p> <p>examples 2-4</p> <p>claims</p> <p style="text-align: center;">-----</p> <p style="text-align: center;">-/--</p> | 1-15 |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

22 November 2004

Date of mailing of the international search report

17/12/2004

Name and mailing address of the ISA

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | EP 0 983 767 A (CHUGAI PHARMACEUTICAL CO LTD) 8 March 2000 (2000-03-08) column 2, paragraph 10 - column 3, paragraph 23 column 7, paragraph 45 - column 13, paragraph 85 column 16, paragraph 97 - column 18, paragraph 107 column 19, paragraph 113 - paragraph 116 examples 2-4 claims | 1-15 |
| X | EP 1 334 731 A (CHUGAI PHARMACEUTICAL CO LTD) 13 August 2003 (2003-08-13) page 1, paragraph 11 - page 2, paragraph 27 page 6, paragraph 58 - paragraph 65 page 7, paragraph 77 - page 8, paragraph 88 page 9, paragraph 97 - paragraph 101 claims; examples | 1-15 |
| X | EP 1 074 268 A (KISHIMOTO TADAMITSU ;CHUGAI PHARMACEUTICAL CO LTD (JP)) 7 February 2001 (2001-02-07) page 3, paragraph 26 - page 4, paragraph 33 page 6, paragraph 59 - page 7, paragraph 72 page 8, paragraph 80 - paragraph 87 page 11, paragraph 122 - paragraph 126 claims; examples | 1-15 |
| X | WO 98/36061 A (FERGUSON MARK WILLIAM JAMES ;KANE SHARON O (GB); UNIV MANCHESTER ()) 20 August 1998 (1998-08-20) page 1, line 1 - page 3, line 13 page 6, line 1 - line 27 page 10, line 1 - page 11, line 14 page 15, line 14 - line 24 claims; examples | 1-15 |
| X | US 5 856 135 A (TSUCHIYA MASAYUKI ET AL) 5 January 1999 (1999-01-05) column 1, line 1 - line 65 claims; examples | 1-15 |
| X | EP 0 617 126 A (AJINOMOTO KK) 28 September 1994 (1994-09-28) page 2, line 1 - line 8 page 3, line 24 - line 54 claims; examples | 1-15 |

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d Application No

PCT/EP2004/010584

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | <p>US 2001/001663 A1 (KISHIMOTO TADAMITSU ET AL) 24 May 2001 (2001-05-24)</p> <p>page 1, paragraph 2</p> <p>page 2, paragraph 23 - paragraph 30</p> <p>page 3, paragraph 36 - page 4, paragraph 51</p> <p>claims; examples</p> <p>-----</p> | 1-15 |
| X | <p>US 5 888 510 A (KISHIMOTO TADAMITSU ET AL) 30 March 1999 (1999-03-30)</p> <p>column 2, line 43 - column 3, line 13</p> <p>column 3, line 40 - column 4, line 2</p> <p>column 6, line 9 - line 55</p> <p>claims; examples</p> <p>-----</p> | 1-15 |
| X | <p>MIHARA M ET AL: "IL-6 receptor blockage inhibits the onset of autoimmune kidney disease in NZB/W F1 mice"</p> <p>CLINICAL AND EXPERIMENTAL IMMUNOLOGY, OXFORD, GB,</p> <p>vol. 112, no. 3, June 1998 (1998-06), pages 397-402, XP002179019</p> <p>ISSN: 0009-9104</p> <p>page 397 - page 402</p> <p>-----</p> | 1-15 |
| X | <p>MIHARA M ET AL: "HUMANIZED ANTIBODY TO HUMAN INTERLEUKIN-6 RECEPTOR INHIBITS THE DEVELOPMENT OF COLLAGEN ARTHRITIS IN CYNOMOLGUS MONKEYS"</p> <p>CLINICAL IMMUNOLOGY, ACADEMIC PRESS,, US, vol. 98, no. 3, March 2001 (2001-03), pages 319-326, XP001069970</p> <p>ISSN: 1521-6616</p> <p>page 329 - page 326</p> <p>-----</p> | 1-15 |

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 13
because they relate to subject matter not required to be searched by this Authority, namely:
Although claim 13 is directed to a method of treatment of the human body (Article 52(4) EPC), the search has been carried out and based on the alleged effects of the composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter al Application No
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Information on patent family members

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